FD-340b (Rev. 2-5-93)

A2

Universal Case File Number 2BB-NY-26B557

Field Office Acquiring Evidence NYO

Serial # of Originating Document _____

Date Received 11/5/98

From _____

_____

(Address of Contributor)

By _____ ~~ate)~~

(Name of Special Agent)

To Be Returned ☐ Yes ☒ No

Receipt Given ☐ Yes ☒ No

Grand Jury Material – Disseminate Only Pursuant
to Rule 6 (e), Federal Rules of Criminal Procedure

☐ Yes ☒ No

Title: ELECTRONIC DISTURBANCE THEATER)

_____

ETC, ET AL
OO: NY
CITY

Reference: _____

(Communication Enclosing Material)

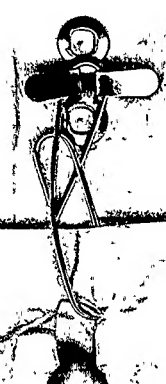**Description:** ☐ Original notes re interview of
PRINTOUT + FILES ON 3½" DISC.
DEFENSELINK INFO ON 9/10/98 INCIDENT

Item	Date Filed	To be re... Yes

Disposition

b6
b7C per DTIC

b6
b7C

b6
b7C

Web Service User Productivity Loss Cost Estimate

Web Service	Average # Requests/hr	Qtr. Hr. Lost Per user	Hr. Lost Per user
DefenseLINK	2883	$15,373.60	$61,494.39
www.dtic.mil	5532	$29,499.39	$117,997.56
Down 1 Hour		$44,872.99	$179,491.95
Down 4 Hours		$179,491.95	$717,967.80

Productivity Loss Range: **$44,872.99 to $717,967.80**

Notes and Assumptions:

Average downtime of server is 1 hour.

The server could be brought down multiple times during an event, driving up user impact costs.

Some Users will perform other productive tasks after failing to access server and if possible, revert to manual systems.

Some Users will face a greater impact than others, therefor a cost estimate range is being provided.

$21.33 / hour average base salary (excluding overhead). Average grade 9.3.

Taken from Profile of Federal Civilian Non-Postal Employees March 31, 1998

DefenseLINK and www.dtic.mil are on the same hardware.

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To give you some idea of the impact of a hacker or a denial of service attack bringing down our public access servers we are providing statistics from our log files and a narrative summary for some of our more popular web services.

The Statistics consist of the service title, the number of unique IP addresses to visit the site in a week and the average number of pages per hour and day.
Example:

> PER DIEM
> 23152 unique hosts.
> 823.9 html pages per hour.
> 19773 html pages each day.(Average estimate)

These statistics can be used as an indicator as to how many users would be effected if the service was brought down by a denial of service attack. The listing provided here are for the week before the attack and the week after the attack. They are further split by DefenseLINK sub level sites and other sites residing on the same hardware server.

The narratives will provide some sense of the impact this service has on the user community. Once again it is divided by DefenseLINK and other sites residing on the same hardware server.

I hope you will find this material helpful in understanding why we work very hard to preserve access and integrity to the server.

Denial of Service Attack against DefenseLINK·

DTIC became aware in late August that DefenseLINK was the target of a cyberattack.
Sponsored by the ELECTRONIC DISTURBANCE THEATER. *See news release below.*

They planned to flood DefenseLINK and other selected web sites with requests for
service in an attempt to cause the system to choke and thus deny access to other users.
The group provided its members with a software program, a java applet, which accessed
the target site(s) every few seconds.

In preparation for the attack DTIC took precautionary steps to minimize the effect of such
an attack, but warned customers that access to DefenseLINK might be diminished. [   ]
[   ] DTIC's primary point of contact in OSD PA notified OSD of the expected attack on
Friday, September 4. The following is his email message.

b6
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> An activist group is apparently planning an "Electronic Civil Disobedience"
> attack on Sep 9, and several other dates later in the fall. They plan to
> flood DefenseLINK and other selected web sites with requests for service in
> an attempt to cause the system to choke and thus deny access to other users. ·
> The group provides its members with a software program which accesses the
> target site(s) every few seconds.
>
> DTIC has taken a range of steps to minimize the effect of such an attack,
> but access to DefenseLINK may be slow or be delayed on Sep 9.
>
> There is a backup DefenseLINK web site at the DTIC offices in San Diego, CA.
> The URL to access the backup DefenseLINK site is:
> http://alt.defenselink.mil This alternative site is updated every few hours
> so will not have new releases as soon as they are posted.
>
> The group's news release is below.

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b7C per DTIC

[   ]

ELECTRONIC DISTURBANCE THEATER BULLETIN
Advance News Release
Tuesday, August 25, 1998
TELL THE WORLD: STOP THE WAR IN MEXICO NETSTRIKE AGAINST
GOVERNMENT, MILITARY, AND FINANCIAL WEB SITES IN MEXICO,
THE UNITED STATES, AND GERMANY CALL FOR FLOODNET ACTIONS
(SWARM) ON SEPTEMBER 9 AGAINST PRESIDENT ZEDILLO,
PENTAGON, AND FRANKFURT STOCK EXCHANGE FALL CAMPAIGN
ON THE STREET AND THE NET REAL AND VIRTUAL TOGETHER
In solidarity with the Zapatistas, indigenous peoples in Chiapas, others

resisting the Mexican government, the global pro-Zapatista movement, and people everywhere struggling against neoliberalism and the global economy, the Electronic Disturbance Theater urges SWARM actions, multiple acts of Electronic Civil Disobedience, on Wednesday, September 9, 1998. (http://www.nyu.edu/projects/wray/ecd.html)
To demonstrate our capacity for simultaneous global electronic actions and to emphasize the multiple nature of our opponents, FloodNet will target three web sites in Mexico, the United States, and Europe representing three important sectors: government, military, and financial. In Mexico, FloodNet will target President Zedillo's web site, (http://www.presidencia.gob.mx/) an obvious choice and one we have made before. In the United States, FloodNet will target the Pentagon, (http://www.defenselink.mil/) also an obvious choice given the level of U.S. military and intelligence involvement in Mexico. And in Germany, FloodNet will target the Frankfurt Stock Exchange, (http://www.exchange.de/) a less obvious choice, but one that makes sense as it is a key European financial site with high symbolic value and as Germany is a major player in the global neoliberal economy. The Electronic Disturbance Theater calls these electronic actions in conjunction with its participation in the Ars Electronica Festival on Infowar, held in Linz, Austria, from September 7 to 12. (http://web.aec.at/infowar/) We urge people to join our actions and we urge people to engage in their own actions at the same time as ours. We urge multiple actions, virtual and real, on multiple levels, aimed at multiple targets, from multiple sources, both on September 9, but also for a series of dates scheduled for this fall. We call for hybrid street/Net actions on September 16, October 12, and November 22. September 16 is Mexican Independence Day.
The Mexico Solidarity Network in North America has called for a month-long series of activities starting on this day and ending on October 12, Columbus Day in the United States. The North East Zapatista Solidarity Network has called for actions on October 12. And in New York, on Oct. 12, the New York Zapatistas are planning a Festival of Resistance that includes a march to the United Nations. As happened last year, this November 22 there will be another civil disobedience action at the School of the Americas, a good opportunity for a joint civil disobedience - electronic civil disobedience action. Stay tuned to th Electronic Civil Disobedience page for details of Sept. 9, Sept. 16, Oct. 12, Nov. 22, and other actions this fall. http://www.nyu.edu/projects/wray/ecd.html (site just reorganized - take a look) * The Electronic Disturbance Theater

On the day of the attack, repeated accesses to the DTIC servers begin shortly after midnight. The approach being taken was to tie up our search engine with multiple requests, increasing server load and thereby slowing response times. Initially many of the requests were coming from a specific network in Austria. Access from this network to DTIC computer systems was blocked at the at the DTIC router.

DTIC programmers noticed consistencies in the large URL's used by the attacking requests and, using a simple Perl CGI program, filtered out the unwanted requests by sending them a "Location" command that redirected their requests to the URL of a non-existent web server. After the filter was in place, load on the server dropped significantly.

The Reuters News **Pentagon Beats Back Internet Attack**, Thursday, September 10, 1998 indicated that the Pentagon struck back at the cyber attackers forcing them to reboot their computers. Since a counterattack had not been our intent, we were curious to know why this was reported. We tested the Java applet used by the Electronic Disturbance Theater against our site and discovered that it opened hundreds windows on the desktop computer, necessitating a reboot. This behavior may have been triggered by the DTIC system's response to the applet. DTIC did not write any Java applet, contrary to the Reuters story. See Reuters story below:

> **Pentagon Beats Back Internet Attack**
> Thursday, September 10, 1998
> By Niall McKay
>
> SAN FRANCISCO (Wired) - The Pentagon struck back against Internet activists who attempted to hold an ``online sit-in" Wednesday at the Defense Department's main Web site.
>
> The attack, which attempted to overwhelm the Web servers, also targeted sites for the Frankfurt Stock Exchange and the president of Mexico. ``Our support personnel were aware of this planned electronic civil disobedience attack and were able to take appropriate countermeasures," said Defense Department (http://www.defenselink.mil) spokeswoman [   ]   b6   b7C per DTIC
>
> The group of Internet activists, who call themselves Electronic Disturbance Theater (http://www.nyu.edu/projects/wray/ecd.html), support the Zapatista rebels in Chiapas, fighting against the Mexican government. To draw attention to this cause, they attempted to temporarily disable certain Web sites by asking demonstrators to load a hostile Web-based program called FloodNet.
>
> But the Pentagon said that the FloodNet attack -- which attempts to overwhelm Web servers by requesting multiple pages simultaneously -- didn't get far. The Defense Department hinted that electronic countermeasures fended off the protesters.
>
> ``Measures were taken to send the countless demands from the attacker's servers into the great beyond," Hansen said.
>
> Participants in the FloodNet protest needed only to load the FloodNet Web page. The page contained a Java applet configured to request and load the three target Web sites every three seconds. The Electronic Disturbance Theater estimated that

up to 10,000 people took part in the demonstration, delivering 600,000 hits to each of the three Web sites per minute.

The automated rapid-fire requests are designed to overwhelm the target Web sites so they cannot be viewed by their intended audience, known as a ``denial of service" attack.

The Pentagon's Web site support team apparently struck back with a Java applet of its own. That applet sensed requests from the FloodNet servers, and loaded-and reloaded-an empty browser window on the attacker's desktop. The move forced the protesters to reboot their computers.

The Electronic Disturbance Theater declared the protest a success.

``Our interest is to help the people of Chiapas to keep receiving the international recognition that they need to keep them alive," said Brett Stalbaum, a member of Electronic Disturbance Theater and author of the FloodNet software.

The group described its action as electronic civil disobedience -- a relatively new phenomena, according to a lecturer with the Department of Economics at University of Texas at Austin.

``In a lot of ways it is simply the modern version of the tradition of civil disobedience," Harry Cleaver said ``But there are a lot of problems associated with it. For instance, should US protesters have the right to protest on a foreign government's Web site?"

For Stalbaum, the answer is yes.

``We protested the Mexican president's site for an obvious reason," he said. ``We protested the Pentagon site because we believe that the US military trained the soldiers carrying out the human rights abuses at the School of the Americas."

However the action at the Frankfurt Stock Exchange was a symbolic protest against globalization, which is at the root of the Chiapas' problems, according to Stalbaum.

Officials at the Frankfurt Stock Exchange were aware of the protest but believed that it had not affected their services. "We get about 6 million hits a day," said a spokesman. ``We were not aware of any reduction in services today."

The action was funded by a $4,500 grant from TKTKTTmark, (pronounced ``artmark") an activist group dedicated to anti-corporate activism by channeling funds from donors to workers.
(Reuters/Wired)
http://news.lycos.com/stories/technology/wired/19980910rtinternet-pentagon.asp

Detailed Summary:

1) DTIC was alerted ahead of time of EDT's planned attack and was monitoring systems on the morning of Sept 9. One Domain was denied access at the router.

2) The web server log files revealed an unusually large number of requests running the Fulcrum "multigate" search engine program. The terms in the search were suspiciously non-English and political.

Examples:

Gerechtigkeit dÂtachement
disinterest justice
Gerechtigkeit fair-mindedness
imparcialidad objectiveness
ÂquitÂ giustizia
dÂtachement objectivity
equality ÂquitÂ
imparcialidad objetividad
obiettivitÂ honneur
human_rights fairness
dignitÂ Gleichheit
respecto objectiveness

These requests were coming in at a rate that clearly implied a denial-of-service attack.

3) In an attempt to filter out the denial-of-service attempts, changes were made in the html files on the DefenseLINK web site so that legitimate searches would have URL's that were subtly different from the URL's used by the attacking requests.

4) A Perl program was created that detected the difference between legitimate URL's and attacking URL's. This program worked as a filter: It passed the legitimate search requests to the multigate program, but when it detected an attacking URL it returned the following message to the requester:

Location: http://reload-your-search-page.please

(The URL in this message points to a non-existent web server.)

This filter program was inserted into the place of the "multigate" program so that all requests to the multigate program would flow through the filter program first.

5) DTIC programmers tested the Java applet used by the Electronic Disturbance Theater. The applet opened hundreds of Java applet windows on one's desktop computer, consuming all CPU cycles. A power-off reboot was necessary to restore control. DTIC

programmers have surmised that this bad behavior may have been triggered by DTIC's use of the Location command, but that wasn't confirmed.

7) DTIC did not write any Java applet, contrary to the Reuters story.

8) After the filter was put in place 50,000 searches were turned away, submitted by 1500 unique IP addresses.

Summary prepared by:

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DESCRIPTIONS WWW.DTIC.MIL

PER DIEM, utilized both by individual DoD employees and by DoD administrative organizations, provides the latest per diem rates, Basic Allowance for Housing, Overseas Housing Allowance, Overseas Cost of Living Allowance and other documentation issued by the Per Diem, Travel and Transportation Allowance Committee. Much of this information is frequently updated and the most recent releases are required for correct reimbursement computations throughout the DoD. The Defense Finance and Accounting System depends on this site for the data they utilize in calculating correct rates of payment. Even a brief disruption of access to this site could have far-reaching consequences throughout the Department.

JOINT DOCTRINE is heavily used both by personnel involved in the development and utilization of doctrine and by the military schools to obtain electronic access to many key reference materials which are published on the site. These include such items as the DoD Dictionary, research papers, historical publications, specialized doctrinal publications, and numerous regulatory and guidance issuances. In many instances, access to these publications from a given location may be available only through this Web site, and lack of access would have a significant negative effect on a wide range of DoD activities.

C3I includes internal memoranda and other key documents vital to the management of the Command, Control, Communications and Intelligence activities of the DoD. A large collection of Information Technology resource management information used throughout DoD is also accessed on the C3I site, such as reporting guidance, POM Preparation Instruction (PPI) information, links to the new IT reporting software, and tables specific to Information Technology reporting. In addition, this site is the official entry point for Year 2000 (Y2K) documents for the DoD, including the Y2K Management Plan, the DoD Y2K briefing, interface assessment workshop summaries, policy statements, and issuances from the C3I Senior Civilian Official's office and the Secretary of Defense. Consolidated access to these documents allows more effective conduct of overall DoD IT processes as well as the critical Y2K process; lack of access would affect IT management throughout DoD.

C3I BPR, incorporating the Electronic College of Process Innovation is a comprehensive set of documents, tools, and guidebooks on the topic of business process change and creating customer value. It provides specific tools to organizational change agentsand supplies senior executives with briefing materials and management information. Lack of access has the potential to affect numerous in-progress reengineering efforts.

JCSLINK presents centralized access to a large compendium of information for and about the Joint Staff. In addition to the resources detailed above, under Joint Doctrine, JCSLink includes electronic versions of official regulations and instructions; the Joint Staff's electronic newspaper; recent speeches by the Chairman of the Joint Chiefs of Staff; his vision for America's Armed Forces in the 21st Century, Joint Vision 2010; and information on joint history, strategy, training and personnel. This mixture of types and sources of information provides a one-stop source for both DoD and external users which

is not available in any other format; lack of access would hamper the actions of those who require this information for immediate utilization.

STINET, the DTIC Scientific and Technical Information Network, offers the DoD community access to pertinent scientific and technical information to meet mission needs more effectively. The public Web site provides access to all unclassified, unlimited citations in the DTIC Technical Reports database since 1985, as well as many other unrestricted DoD scientific and technical information resources. Curtailing access to STINET would affect not only the DoD, but also the Defense contractor and academic communities, which rely heavily on it as a source of research information.

COMPTROLLER supplies the Financial Management Regulations (FMRs), which account for over 95% of the traffic on the site. The FMRs are used throughout the DoD to govern activities such as general financial management, budget presentation and execution, accounting, disbursing, military and civilian pay and travel, contract payment, reimbursable operations, special accounts funds and programs, nonappropriated funds, administrative control of appropriations, and security assistance. Without electronic availability of the current versions of the FMR, DoD activities cannot be assured of timely, accurate information on which to base financial activities.

ENVIRONMENTAL CLEAN UP provides information to federal and local governments, the contractor community and the general public on DoD activities designed to reduce the risks to human health and the environment at active, formerly used, and closing bases, while ensuring that DoD environmental cleanup policy conforms to existing laws and regulations. If this information were not available for any period of time, the impact would be felt not only in DoD, but throughout the community affected by environmental clean up efforts such as individual states, local communities, and small businesses and other commercial concerns active in this area.

DESCRIPTIONS WWW.DEFENSELINK.MIL

DEFENSELINK is the top-level entry to all official DoD Web resources. It is widely used by DoD employees, the national and international media, and the world wide public. Overall, DefenseLINK averages 500,000 access weekly, and the loss of these resources, even for a short period would seriously impact many government and private-sector activities. Among the individual sections of DefenseLINK which are accessed most frequently are: News, Publications, Photos, Locator, and Questions. In addition to these DefenseLINK services, one of the subordinate sites, Office of the OSD General Counsel, receives a significant portion of the activity in this domain. (While the Comptroller site is also very active, as reflected above, it included in the DTIC.mil domain rather than in Defenselink.mil.)

DEFENSELINK NEWS accounts for nearly 25% of the accesses to DefenseLINK, and provides the latest DoD news, features and press information to the news media; the general public; other Federal and foreign government agencies; mililtary and civilianDoD employees, and military service family members; and Defense contractors. Material from this section is also delivered directly to subscribers through the News by Email service. Without the availability this site, the media would be denied timely access to developing news, the requirement to publish DoD contract awards would be unmet, memoranda for correspondents and press advisories which provide background and notification of events would not be published, live news briefings would not be broadcast, and the extensive archive of DoD Public Affairs issuances would be inaccessible. The damage created by even short-term lack of access to DefenseLINK News would be widespread, and would include the functions of the Office of the Assistant Secretary of Defense for Public Affairs (OASD(PA)), operations of domestic and foreign media agencies, civilian and military DoD employees, other government agencies, and the private sector contractor community. In addition, there is incalculable damage associated with stifling the free flow of information between the DoD and its various communities of interest.

DEFENSELINK PUBLICATIONS provides centralized access to a broad variety of resources which originate within numerous sources and are used by a widely varied audience. Among the publications which are available are the OSD/Joint Staff Electronic Reading Room which is required by the Freedom of Information Act, 5 USC 552(a)(2)(D), and links to other DoD electronic FOIA sources; general Defense personnel statistics, overall procurement statistics and trends, and geographical procurement information; individual reports issued by DoD on a variety of topics of high interest such as DoD restructuring, and base closure; the complete library of DoD Directives and Instructions, including downloadable forms; and other core reference materials required by DoD employees to perform their mission. Without the electronic availability of this information, access would be fragmented and, in some cases, impossible to achieve, affecting all DoD management and administrative functions, as well as the general public.

DEFENSELINK PHOTOS is another heavily utilized portion of the DefenseLINK structure. It is the only means by which media organizations can obtain official DoD

photographs electronically, and it is of vital importance to both the functions of OASD(PA) and the worldwide news media. If this service were not available, not only would there be considerable delay in the dissemination of the photos, which would be accomplished by photocopying and mailing or faxing them, but increased expense would be incurred by the DoD in performance of the necessary manual processing of photo requests. It has been estimated by OASD(PA) that a savings of approximately $1,500,000 per year, or over $4,000 per day, is realized by the Department in the electronic dissemination of photographs, so even a brief disruption of service would result in a significant financial loss.

DEFENSELINK LOCATOR provides, among its other functions, access to the DoD implementation of the Government Information Locator Service as mandated by the Office of Management and Budget. In addition, to the Locator, the broader DefenseLINK search mechanism enables users to locate specific items within the DefenseLINK structure. A denial of service in this area would severely limit the ability to identify and retrieve required information, even if other portions of DefenseLINK were uninterrupted.

DEFENSELINK QUESTIONS provides easy access to information most frequently required by the public. Its contents include information categories such as: military service academies, military installation information, recruiting, finding active duty members, getting copies of military records, Base Closures and Realignment (BRAC) information, Specifications and Standards, and information on contacting various offices within DoD. While this information may not be of vital importance in the conduct of DoD's internal mission, it is of significance in providing information needed by individual members of the public, and lack of access would cause intangible harm to the "public face" of the Department.

OSD GENERAL COUNSEL, in addition to general information about the office, presents detailed information concerning Defense Office of Hearings and Appeals (DOHA), and the Legislative Reference Service (LRS). The DOHA site supplies hearings and appeals information for individual programs, links to related sites, a direct email feature and includes a searchable collection of House and Senate bills, and links to other relevant documents, procedures, authorities, and processes. Publishing decisions of the DOHA is required by law (5USC 552(a)(2) and 5USC 552(a)(2)(A)) to meet a specific provision of the Freedom of Information Act (FOIA) as amended in 1996, and the Department of Justice has indicated the Federal agencies should use the Internet/World Wide Web for electronic dissemination of records required to be made public under the FOIA. If the DOHA site were not available, the DoD would not be able to meet these legal and policy requirements. Additionally, the LRS portion of the site enables the DoD to respond to proposed legislation in a coordinated manner, including clearance with the Office of Management and Budget. Denial of access to the OSD General Counsel site would severely hamper these time-sensitive efforts and cause potential damage to DoD's official communications with Congress.

Web Statistics for Statistics for 980920

PER DIEM
    23655 unique hosts.
    850.1 html pages per hour.
    20403 html pages each day.(Average estimate)

JOINT DOCTRINE
    8582 unique hosts.
    512.4 html pages per hour.
    12298 html pages each day.(Average estimate)

C3I
    7100 unique hosts.
    248.1 html pages per hour.
    5954 html pages each day.(Average estimate)

C3I BPR
    4555 unique hosts.
    161.0 html pages per hour.
    3863 html pages each day.(Average estimate)

JCSLINK
    4134 unique hosts.
    193.9 html pages per hour.
    4654 html pages each day.(Average estimate)

STINET
    3329 unique hosts.
    59.1 html pages per hour.
    1417 html pages each day.(Average estimate)

COMPTROLLER
    2896 unique hosts.
    213.3 html pages per hour.
    5119 html pages each day.(Average estimate)

ENVIRONMENTAL CLEAN UP
    1637 unique hosts.
    50.3 html pages per hour.
    1207 html pages each day.(Average estimate)

Web Statistics for Week Ending 98/09/05

DEFENSELINK NEWS

14874 unique hosts.
565.9 html pages per hour.
13582 html pages each day.(Average estimate)

DEFENSELINK PUBLICATIONS
13950 unique hosts.
275.9 html pages per hour.
6620 html pages each day.(Average estimate)

DEFENSELINK PHOTOS
7490 unique hosts.
223.9 html pages per hour.
5373 html pages each day.(Average estimate)

DEFENSELINK LOCATOR
4700 unique hosts.
61.7 html pages per hour.
1480 html pages each day.(Average estimate)

DEFENSELINK FREQUENTLY ASKED QUESTIONS
2787 unique hosts.
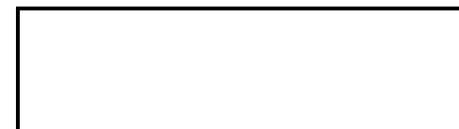45.1 html pages per hour.
1083 html pages each day.(Average estimate)

OSD GENERAL COUNSEL
2166 unique hosts.
66.9 html pages per hour.
1605 html pages each day.(Average estimate)

Web Statistics for Week Ending 98/09/05

PER DIEM
    23152 unique hosts.
    823.9 html pages per hour.
    19773 html pages each day.(Average estimate)

JOINT DOCTRINE
    8370 unique hosts.
    426.4 html pages per hour.
    10234 html pages each day.(Average estimate)

C3I
    6423 unique hosts.
    226.4 html pages per hour.
    5432 html pages each day.(Average estimate)

C3I BPR
    3965 unique hosts.
    148.0 html pages per hour.
    3552 html pages each day.(Average estimate)

JCSLINK
    3579 unique hosts.
    171.1 html pages per hour.
    4107 html pages each day.(Average estimate)

STINET
    2825 unique hosts.
    56.4 html pages per hour.
    1354 html pages each day.(Average estimate)

COMPTROLLER
    2602 unique hosts.
    218.5 html pages per hour.
    5244 html pages each day.(Average estimate)

ENVIRONMENTAL CLEAN UP
    1656 unique hosts.
    97.1 html pages per hour.
    2329 html pages each day.(Average estimate)

Web Statistics for Week Ending 98/09/19

DEFENSELINK PUBLICATIONS
   17775 unique hosts.
   339.7 html pages per hour.
   8153 html pages each day.(Average estimate)

DEFENSELINK NEWS
   16688 unique hosts.
   650.8 html pages per hour.
   15620 html pages each day.(Average estimate)

DEFENSELINK PHOTOS
   8415 unique hosts.
   293.3 html pages per hour.
   7040 html pages each day.(Average estimate)

DEFENSELINK LOCATOR
   5254 unique hosts.
   77.3 html pages per hour.
   1855 html pages each day.(Average estimate)

DEFENSELINK FREQUENTLY ASKED QUESTIONS
   3286 unique hosts.
   54.1 html pages per hour.
   1297 html pages each day.(Average estimate)

OSD GENERAL COUNSEL
   2361 unique hosts.
   80.8 html pages per hour.
   1939 html pages each day.(Average estimate)

World Wide Web Services

Defense Technical Information Center

22 October 1998

DTIC WWW Servers

Services Provided	Example Sites
◆ Static Web Pages	◆ DefenseLINK
◆ Dynamic Web Pages	◆ JCSLink
◆ Libraries	◆ Air Force Link
◆ Comment Forms	◆ GulfLINK
◆ Collaborative Tools	◆ S&T InfoWeb
◆ Document Review & Coordination	◆ Early Bird
	◆ Critical Infrastructure
◆ Multimedia (live broadcasts, audio, video)	◆ Comptroller
	◆ Personnel & Readiness
	◆ PerDiem
◆ Full Text Search	◆ ArmyLINK
◆ Relational Databases	◆ Technology Navigator

8 Separate Web Servers
90 Primary Web Sites
7 X 24 Operation

Server

WEB SERVER

WEB PAGE

THE SHARPER IMAGE
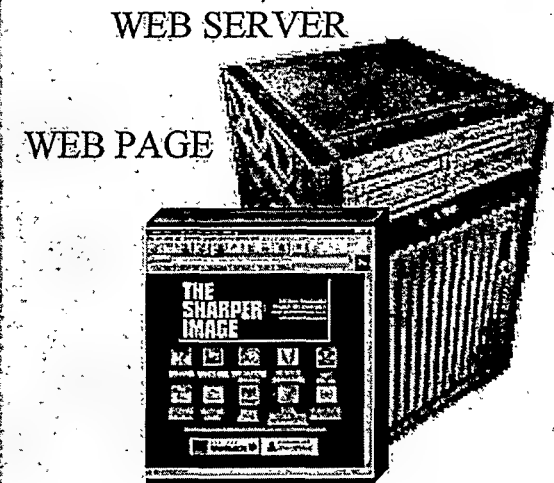
DTIC WWW Usage

Client
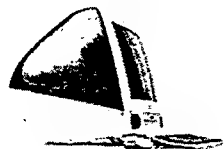
User Communities	Weekly Activity
◆ DoD	◆ 3,000,000 Accesses
◆ Intel Community	◆ 300,000 Unique visitors
◆ US Government	◆ 155,000 MB data delivered
◆ Contractors	
◆ Education	
◆ Media	
◆ US Public	
◆ International	

Public Access Web Services
Limited Access Web Services
(IP, DNS, or Password-restricted)

Standard Processes
for WWW Servers

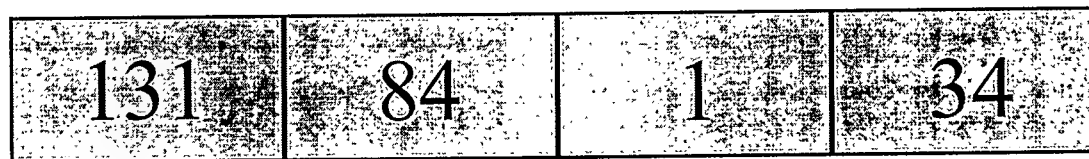**Client**   **Server**

WEB SERVER

WEB PAGE

Internet

CISCO Router

132.52.1.99   IP Address   131.84.1.34
sys1.anna.net   Domain Name   www.defenselink.mil

Internet Protocol Address
IP Address
131.84.1.34

131	84	1	34

Internet Address assigned to and used only by DTIC

Extension of address used internally to locate devices connected to the network (computers, printers, servers)

IP Address and Domain Names

131.84.1.34 = www.defenselink.mil

Domain names are "handles" that make systems more identifiable

IP Addresses are registered with associated domain names at the Network Information Center

These names are posted in an "address book" called the Domain Name Server available to internet computers

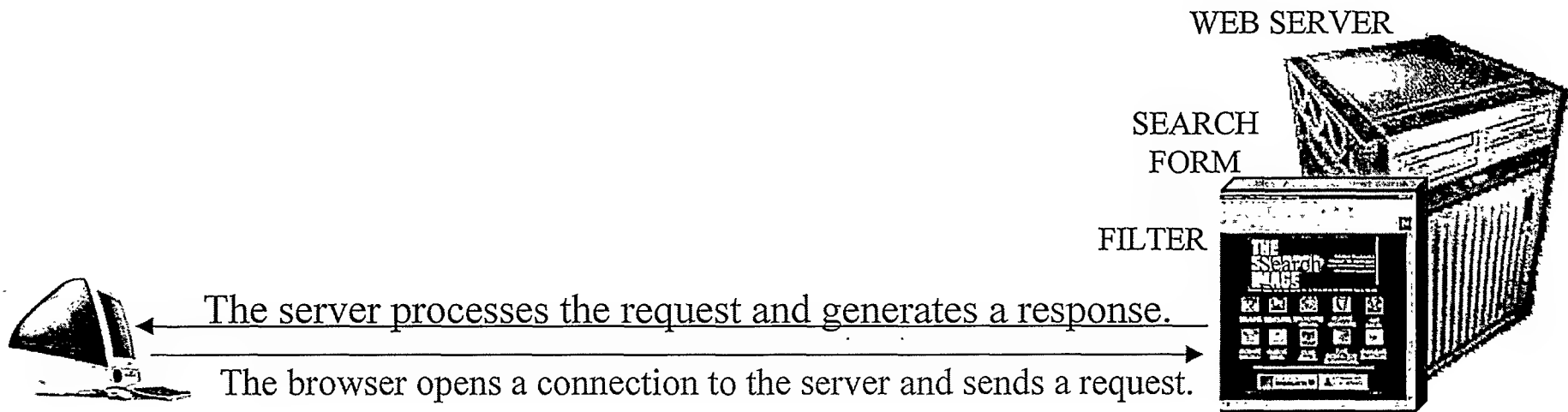Systems use IP addresses to look up the domain names

Hyper Text Transfer Protocol
HTTP Protocol

Client   **Server**

WEB SERVER

SEARCH
FORM

FILTER

The server processes the request and generates a response.

The browser opens a connection to the server and sends a request.

HTTP is a set of rules that allows a
web browser and a web server to
"talk" to each other. HTTP is
based on a request/response model.

Hyper Text Transfer Protocol
HTTP Protocol

The "Location" header is one of many HTTP instructional commands that the web server may pass to the browser.

Hypertext Transfer Protocol -- HTTP/1.1

Section 14.30 Location
The Location response-header field is used to redirect the recipient to a location other than the Request-URI for completion of the request or identification of a new resource. For 201 (Created) responses, the Location is that of the new resource which was created by the request. For 3xx responses, the location SHOULD indicate the server's preferred URL for automatic redirection to the resource. The field value consists of a single absolute URL.

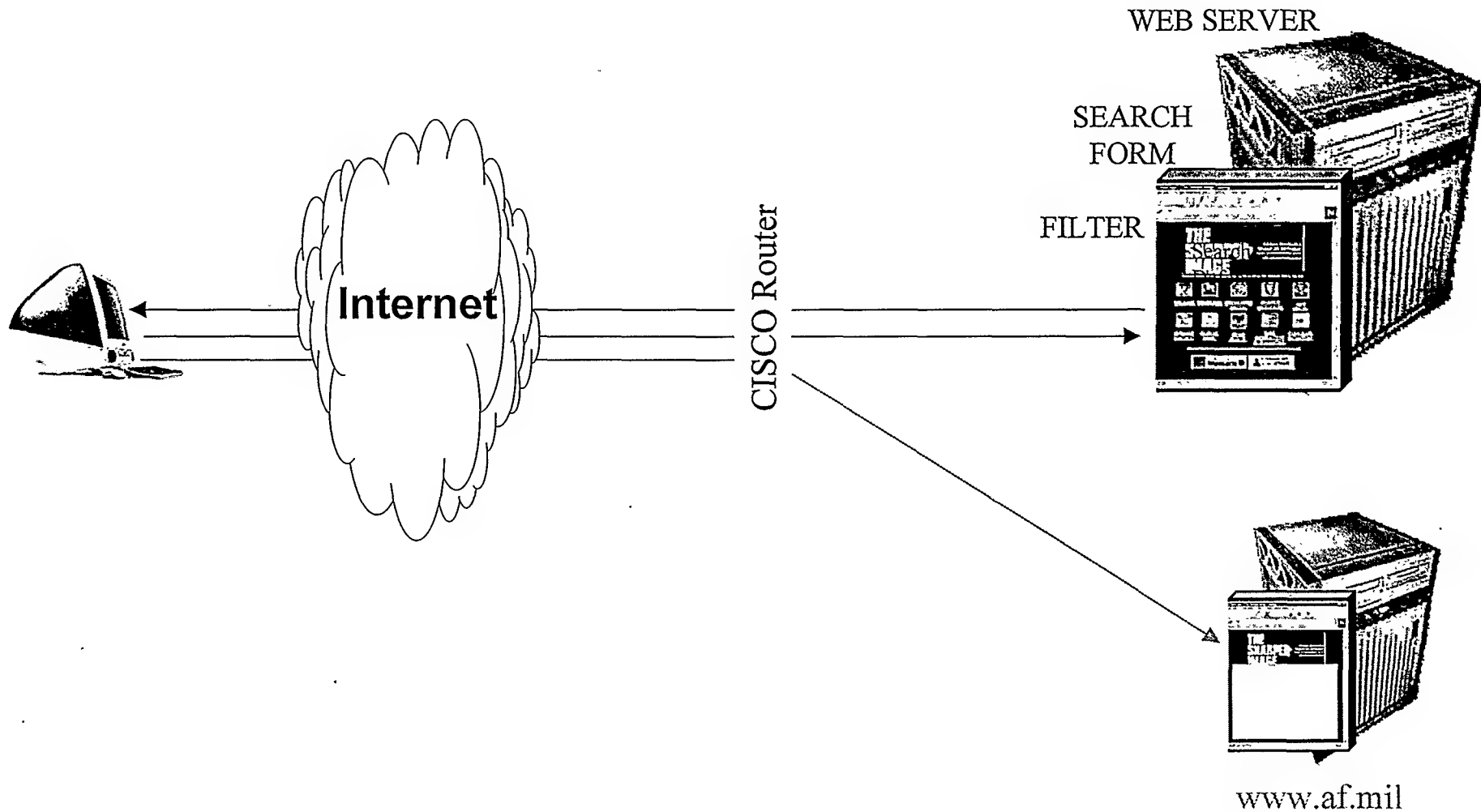   Location   = "Location" ":" absoluteURI

Example:

     Location: http://www.w3.org/pub/WWW/People.html

Standard Processes
for WWW Servers

Client

Redirection = Location Header
Print Location: http:www.af.mil/

Server

WEB SERVER

SEARCH
FORM

FILTER

Internet

CISCO Router

www.af.mil

Standard Security Practices
for WWW Servers

Search Engine Hacker Activity

WEB SERVER

SEARCH
FORM

FILTER

Search
DefenseLINK

Internet

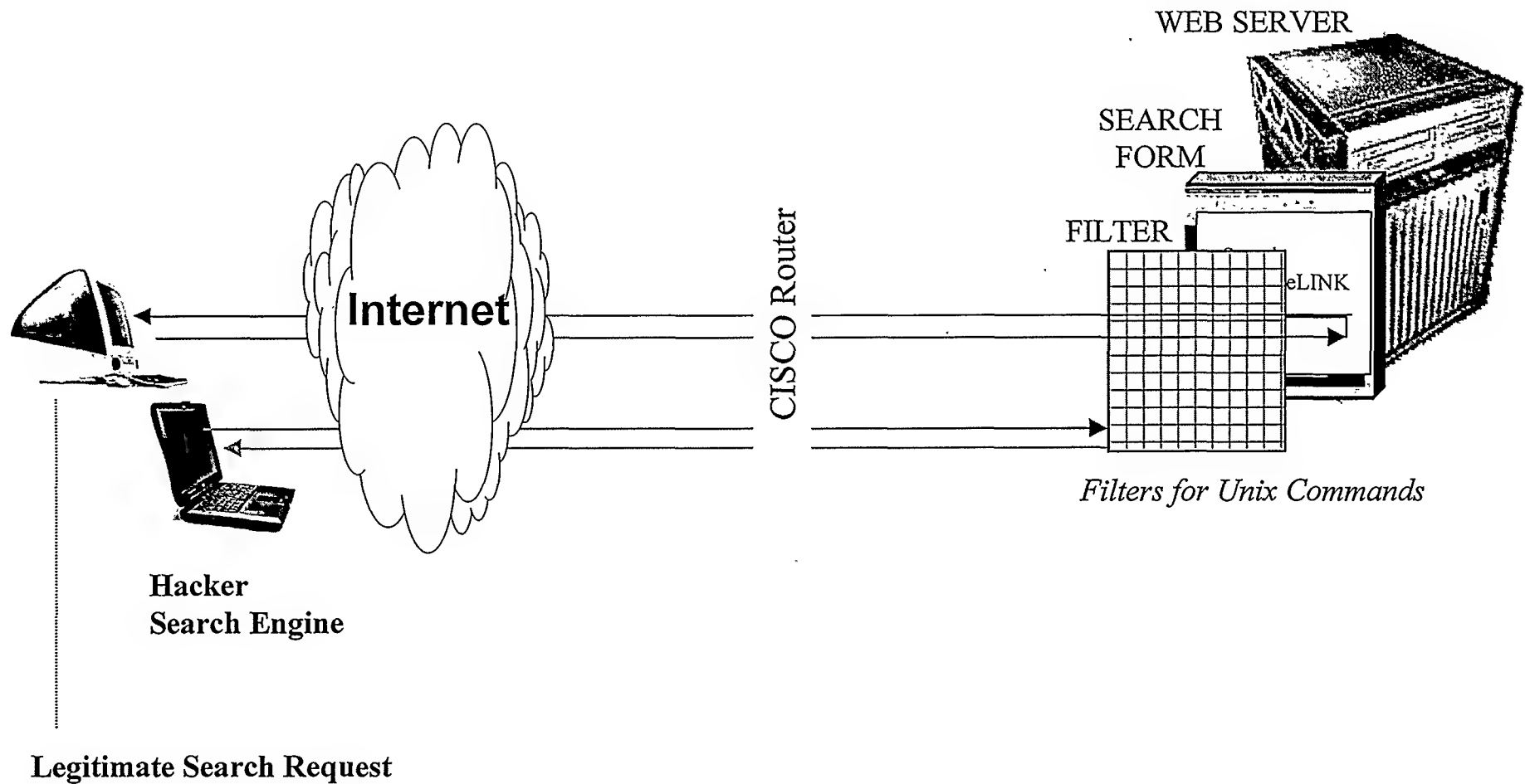CISCO Router

Hacker
Search Engine

Legitimate Search Request
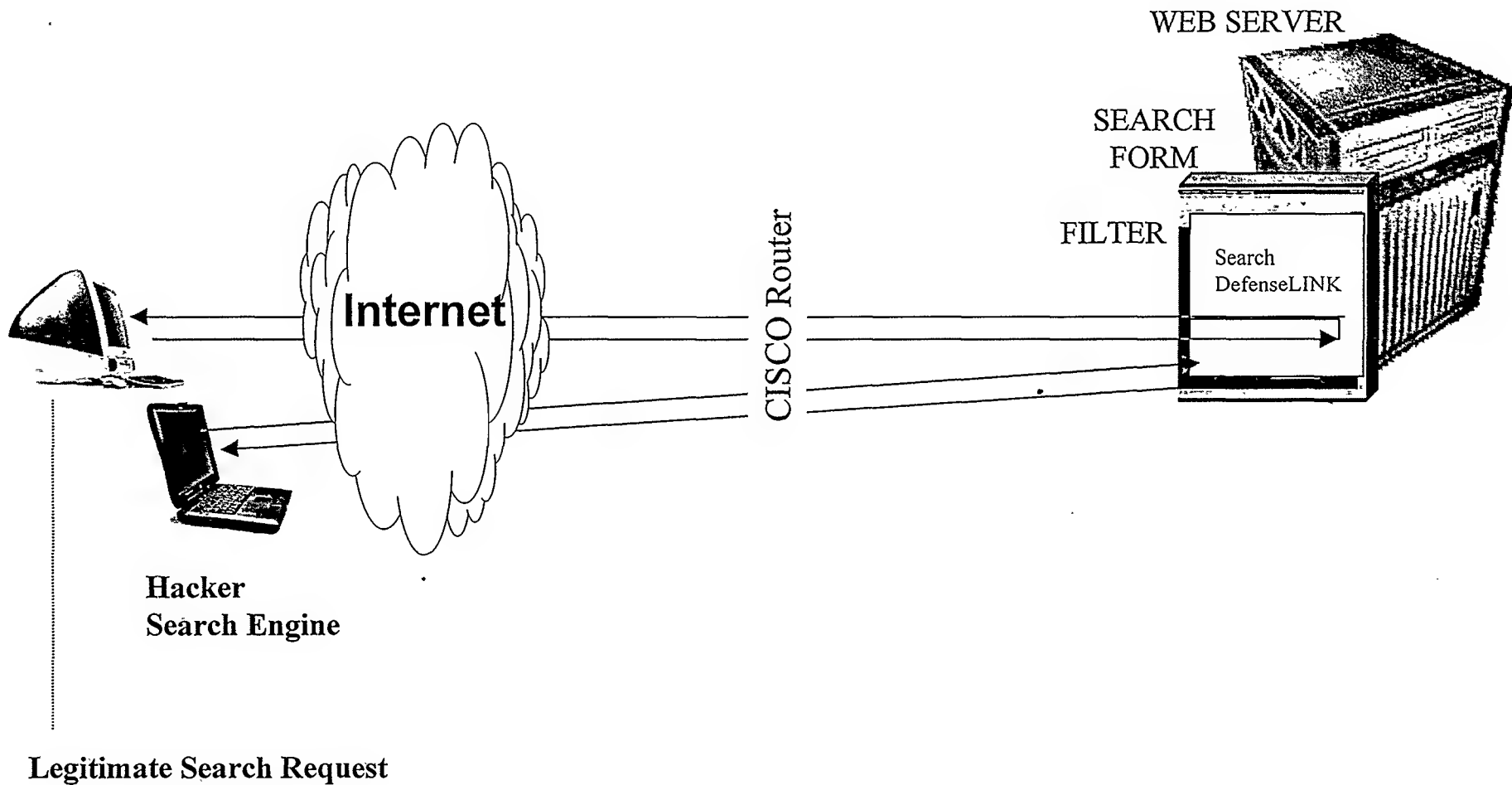
Security and Privacy Notice

1. DefenseLINK is provided as a public service by the Office of the Assistant Secretary of Defense-Public Affairs and the Defense Technical Information Center.

2. Information presented on DefenseLINK is considered public information and may be distributed or copied unless otherwise specified. Use of appropriate byline/photo/image credits is requested.

3. For site management, information is collected for statistical purposes. This government computer system uses software programs to create summary statistics, which are used for such purposes as assessing what information is of most and least interest, determining technical design specifications, and identifying system performance or problem areas.

4. For site security purposes and to ensure that this service remains available to all users, this government computer system employs software programs to monitor network traffic to identify unauthorized attempts to upload or change information, or otherwise cause damage.

5. Except for authorized law enforcement investigations, no other attempts are made to identify individual users or their usage habits. Raw data logs are used for no other purposes and are scheduled for regular destruction in accordance with National Archives and Records Administration guidelines.

6. Unauthorized attempts to upload information or change information on this service are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and the National Information Infrastructure Protection Act.

7. If you have any questions or comments about the information presented here, please forward them to us using the DefenseLINK Contact Us page.
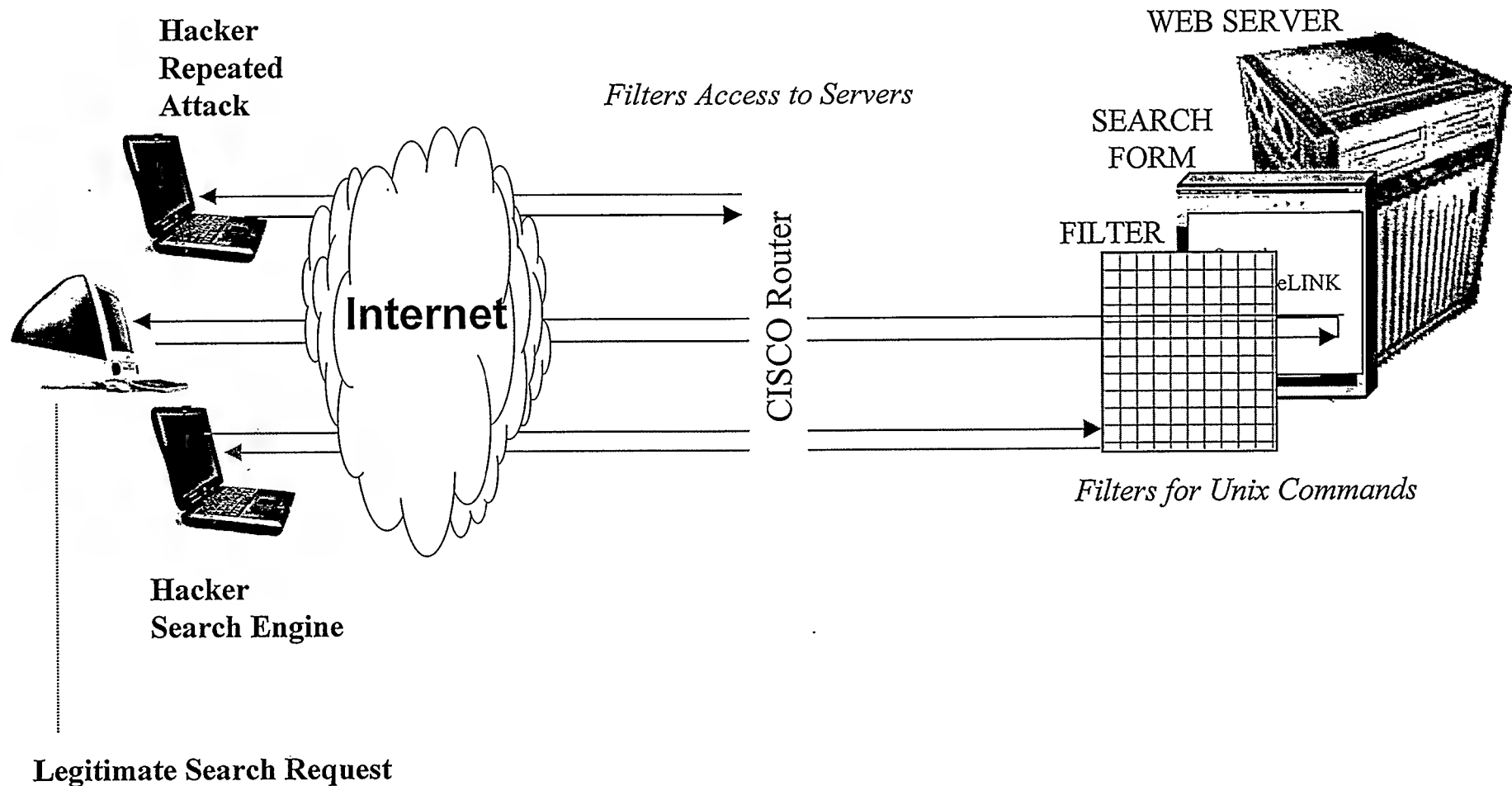
Standard Security Practices
for WWW Servers

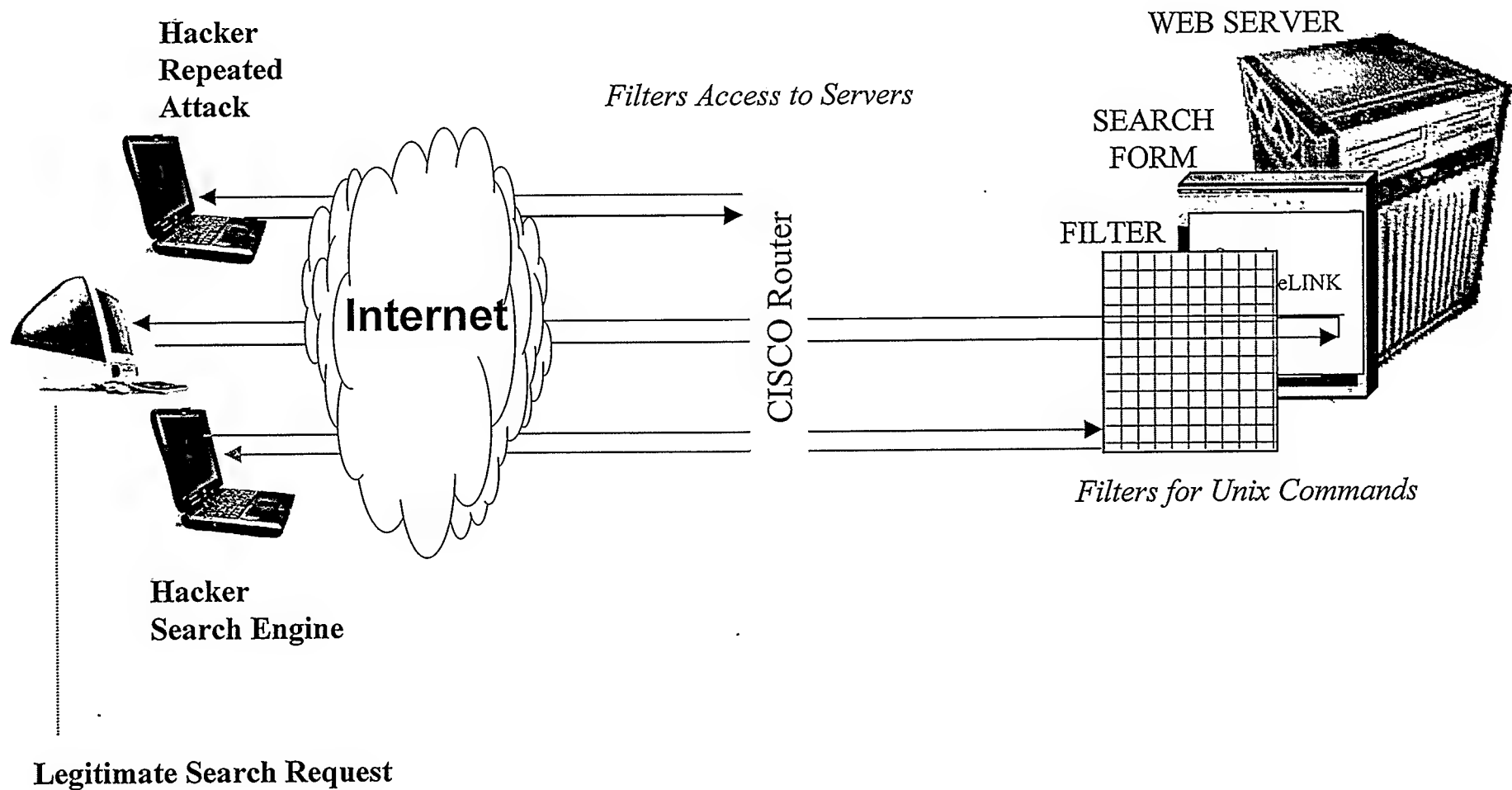Search Engine Hacker Activity
Filtered

WEB SERVER

SEARCH
FORM

FILTER

eLINK

CISCO Router

Internet

Filters for Unix Commands

**Hacker
Search Engine**

Legitimate Search Request

Standard Security Practices
for WWW Servers

Hacker Activity
Repeated Accesses

WEB SERVER

**Hacker
Repeated
Attack**

Filters Access to Servers

SEARCH
FORM

FILTER

CISCO Router

Internet

eLINK

**Hacker
Search Engine**

Filters for Unix Commands

Legitimate Search Request

Standard Security Practices
for WWW Servers

**Hacker
Repeated
Attack**

Filters Access to Servers

WEB SERVER

SEARCH
FORM

Internet

CISCO Router

FILTER

eLINK

Filters for Unix Commands

**Hacker
Search Engine**

Legitimate Search Request

Denial of Service Attack
9 September 1998

Applet was designed to overload our Server
    Complicated Searches were directed to Fulcrum Search Engine

Repeated accesses from a single domain is not normal web usage.
    Access from Austrian Sub-Domain were deflected at router
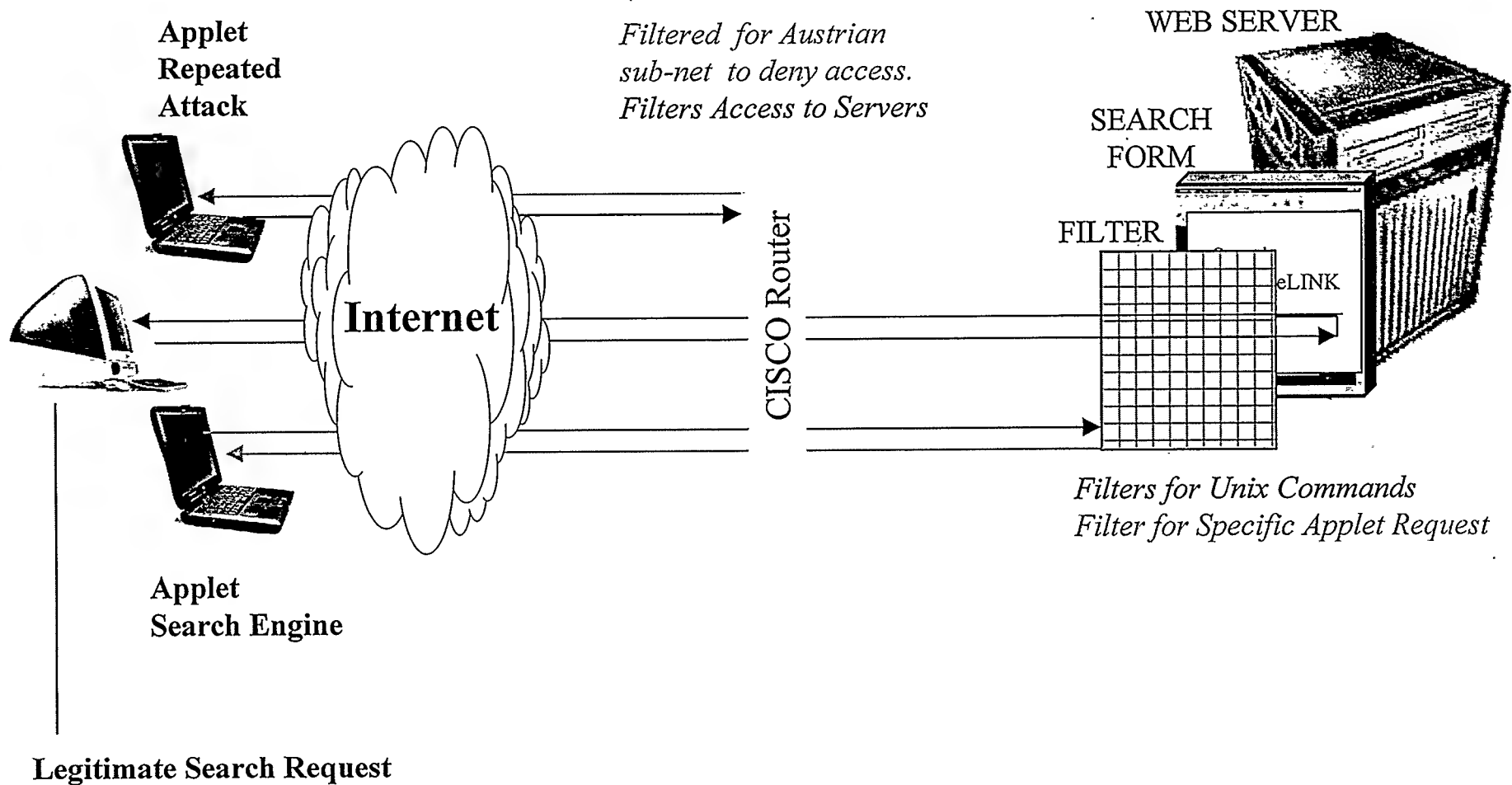   This approach would not work for other applet attackers

DTIC Monitored Server Load
    Server Load was increasing and response times were slowing down
    By 9:00 a.m. server crash became a concern.

Search engine filter was modified to deflect applet searches using standard Web redirection (location header)

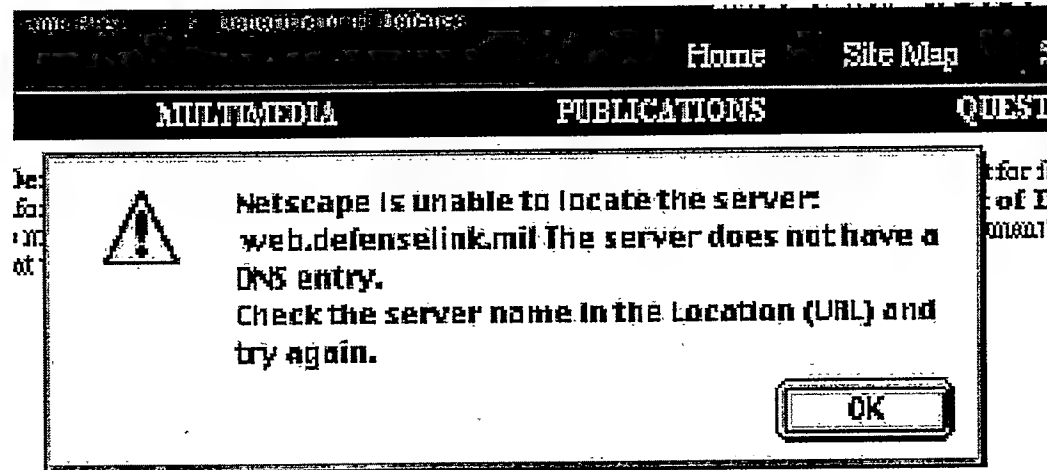# Additional Security Practices
Taken for
Denial of Service Attack

Applet
Repeated
Attack

Filtered for Austrian
sub-net to deny access.
Filters Access to Servers

WEB SERVER

SEARCH
FORM

FILTER

eLINK

Internet

CISCO Router

Applet
Search Engine

Filters for Unix Commands
Filter for Specific Applet Request

Legitimate Search Request

Denial of Service Attack

Server Response:

Location: http://reload-your-search-page.please

They should have
received an
error message
like this:

Applet:

The applet opened hundreds of Java applet windows on an NT desktop computer, consuming all CPU cycles. A power-off reboot was necessary to restore control. DTIC programmers have surmised that this bad behavior may have been triggered by DTIC's use of the Location command, but that wasn't confirmed.

Web Services
on the
DTIC Production Web Server dtics14

Web Domain	Web Service
www.dtic.mil	DTIC Web
www.defenselink.mil	DefenseLINK
www.ngb.dtic.mil	GuardLINK
www.pccip.gov	Critical Infrastructure Protection
www.ciao.gov	Critical Infrastructure Assurance Organization
rdss.dtic.mil	R & D Streamlined Solicitations/Contracts
www.ctr.osd.mil	Cooperative Threat Reduction
doctrine.dtic.mil	Joint Doctrine via password
dtics14 ftp	upload

DTIC Production Web Server
IP- or DNS- or Password-restricted Directories

alsa/pages/restrict/
audit/
bosnia/mail/
cnric/restricted/
c3i/infotech/index2.html
c3i/infotech/software/
c3i/y2k/index2.html
c3i/y2k/milgov/
jcs/jsirmo/
jcs/j4/papers/
comptroller/99budget/
crisisman/
ddre/internal/
ddre/wt/wtm/
doctrine/alt/
doctrine/interactive/
doctrine/jel/dftpubs/
doctrine/jel/ddrraafftt_pubs/
doctrine/jel/pd/draft_pd/
doctrine/jel/cjcsd/cjcsl/
doctrine/jel/wkparty/aminutes/

doms/compio.
doms/compio2.
doms/compio/
doms/plans.
doms/plans2.
doms/caap/
dstp/
dstp/graphics/
dusage/
armylink/abs/inet/
jemp/calendar/restrict/
jwars/j-u-g96/
lablink/collab/
lablink/stcollab/
lablink/survey/
labman/director/
labman/survey/results/
milnews/
npr/af_strict/
npr/army_strict/
npr/central_strict/

npr/dla_strict/
npr/dod_strict/
npr/finance_strict/
npr/investigative_strict/
npr/marine_strict/
npr/navy_strict/
npr/security_strict/
npr/strict_maint/
npr/transp_strict/
npr/whq_strict/
osdpa/
pbd/
pool/
share/devgroup/
share/directors/
share/cendi/
share/jdforum/
share/lii/
share/share2/devgroup/
share/share2/cendiforum/
share/share2/jscc/
share/share2/rtatic/

share/share2/tpso/
share/share2/gils/
share/share2/stcollab/
share/share2/vvte/
stinet/graylit/
technav/mgmt/
techtransit/calendar/restrict/
usage/
usage2/
/search97cgi/
photos/logs/
afd/military/
dodgc/lrs/upload/
dodgc/lrs/hold/
dodgc/lrs/archive/
dodreform/drids/
mirror/
news/preview/
index2.html
upload/
meeting/

Web Access Log Records

pm2e-1-224.innovsoftd.com - - [28/Jan/1996:00:00:01 -0500] "GET
/airforcelink/pa/factsheets/Air_Force_News_Agency.html HTTP/1.0" 200
16704"http://www.defenselink.mil/" "Mozilla/4.05 [en]C-MOENE (Win95; U)"
206.100.165.189 - - [28/Jan/1996:00:00:02 -0500] "GET
/airforcelink/pa/factsheets/C_5A_B_Galaxy.html HTTP/1.0" 200 8897 "http://www.defenselink.mil/"
"Mozilla/4.05 [en]C-MOENE (Win95; U)"
chs0061.awod.com - - [28/Jan/1996:00:00:03 -0500] "GET /bosnia/icons/bosnia_icon.gif HTTP/1.0"
200 4292
tyok088.bekkoame.or.jp - - [28/Jan/1996:00:00:04 -0500] "GET /defenselink/icons/di_search_icon.gif
HTTP/1.0" 200 234 "http://www.defenselink.mil/" "Mozilla/4.05 [en]C-MOENE (Win95; U)"
206.100.165.189 - - [28/Jan/1996:00:00:06 -0500] "GET /airforcelink/pa/factsheets/pictures/c5.gif
HTTP/1.0" 200 14878"http://www.defenselink.mil/" "Mozilla/4.05 [en]C-MOENE (Win95; U)"
www-e3.proxy.aol.com - - [28/Jan/1996:00:00:06 -0500] "GET /defenselink/photos/01996_951228-F-
4867P-003.html HTTP/1.0" 200 1311 "http://www.defenselink.mil/" "Mozilla/4.05 [en]C-MOENE
(Win95; U)"
ts02-and-08.iquest.net - - [28/Jan/1996:00:00:06 -0500] "GET /defenselink/icons/deflink_icon.gif
HTTP/1.0" 200 4149 "http://www.defenselink.mil/" "Mozilla/4.05 [en]C-MOENE (Win95; U)"
wbpxy01.ne.mediaone.net - - [01/Sep/1998:00:01:26 -0400] "GET /cgibin/multigate/search
?h=search%2Frlsthdr.htm&f=search%2Frlstftr.htm&dl=search%2Fdl.txt&mt=240&ct=text%2Fhtml&ct=
application%2Fx-native&s=dbname&md=15&mdt=100&rt=search%2Findex.rtp&dk=
s1news&dk=s1photos&dk=s1allpubs&dk=s1faq&dk=s1gilshtml&dk=s1otherinfo&dk=s1topstory&dk=s1
admin&dk=s1soco&dk=s1lrs&dk=s1industry&dk=s1doha&dk=s1claims&dk=s1civilian&rt=search%2Fin
dex.rtp&qs=audity HTTP/1.0" 200 5516 "http://www.defenselink.mil/" "Mozilla/4.05 [en]C-MOENE
(Win95; U)"

Web Access Log Record
What does it mean?

Web Page Request

pm2e-1-224.innovsoftd.com - - [28/Jan/1996:00:00:01 -0500] "GET /airforcelink/pa/factsheets Air_Force_News_Agency.html HTTP/1.0" 200 16704 "http://www.defenselink.mil/" "Mozilla/4.05 [en]C-MOENE (Win95; U)"

- Domain Name/IP address of user
- Date/Time of Login
- Location of information accessed
- Status Code - 200 is OK - the request was filled
- Size of file in bytes
- Referral - what web page request came from
- Agent - what type of browser was used

Web Access Log Record
What does it mean?
Normal Search Request

wbpxy01.ne.mediaone.net - - [01/Sep/1998:00:01:26 -0400] "GET /cgibin/ multigate/search?h=search%2Frlsthdr.htm&f=search%2Frlstftr.htm&dl= search%2Fdl.txt&mt=240&ct=text%2Fhtml&ct=application%2Fx-native&s= dbname&md=15&mdt=100&rt=search%2Findex.rtp&dk=s1news&dk=s1photos &dk=s1allpubs&dk=s1faq&dk=s1gilshtml&dk=s1otherinfo&dk=s1topstory& dk=s1admin&dk=s1soco&dk=s1lrs&dk=s1industry&dk=s1doha&dk=s1claims &dk=s1civilian&rt=search%2Findex.rtp&qs=audity HTTP/1.0" 200 5516 "http://www.defenselink.mil/" "Mozilla/4.05 [en]C-MOENE (Win95; U)"

- Domain Name/IP address of user
- Date/Time of Login
- Location of information accessed and search string
- Status Code - 200 is OK - the request was filled
- Size of file in bytes
- Referral - what web page request came from
- Agent - what type of browser was used

Example Cyberattack Log Entry

den-co58-100.ix.netcom.com - - [09/Sep/1998:00:47:28 -0400] "GET /cgi-bin/multigate/search?h=search%2Frlsthdr.htm&f=search%2Frlstftr.htm&dl=search%2Fdl.txt&mt=240&ct=text%2Fhtml&ct=application%2Fx-native&s=dbname&md=15&mdt=100&rt=search%2Findex.rtp&dk=s1news&dk=s1photos&dk=s1allpubs&dk=s1faq&dk=s1gilshtml&dk=s1otherinfo&dk=s1topstory&dk=s1admin&dk=s1soco&dk=s1lrs&dk=s1industry&dk=s1doha&dk=s1claims&dk=s1civilian&rt=search%2Findex.rtp&qs=objectivit+fairness HTTP/1.0" 200 - "-" "Mozilla/2.0 (compatible; MSIE 3.0; Windows 95)"

- ■ Domain Name/IP address of user
- ■ Date/Time of Login
- ■ Location of information accessed with search string
- ■ Status Code - 200 is OK - the request was filled
- ■ Size of file in bytes
- ■ Referral - what web page request came from
- ■ Agent - what type of browser was used

Cisco Router Log Records

Sep 9 09:03:57 dtic-gw2.dtic.mil 64996: %SEC-6-IPACCESSLOGP: list 103
denied tcp 195.3.80.49(2061) -> 131.84.1.60(80), 1 packet
Sep 9 09:03:59 dtic-gw2.dtic.mil 64997: %SEC-6-IPACCESSLOGP: list 103
denied tcp 195.3.80.82(2434) -> 131.84.1.60(80), 1 packet
Sep 9 09:04:00 dtic-gw2.dtic.mil 64998: %SEC-6-IPACCESSLOGP: list 103
denied tcp 195.3.80.82(2432) -> 131.84.1.60(80), 1 packet
Sep 9 09:04:02 dtic-gw2.dtic.mil 65000: %SEC-6-IPACCESSLOGP: list 103
denied tcp 195.3.80.82(2434) -> 131.84.1.60(80), 1 packet

Cisco Router Log Records
What does it mean?

Sep 9 09:03:57 dtic-gw2.dtic.mil 64996: %SEC-6-IPACCESSLOGP: list 103 denied tcp 195.3.80.49(2061) -> 131.84.1.60(80), 1 packet

- ■ Date/Time of Login
- ■ Our Router
- ■ Event Sequence Number
- ■ Log type
- ■ Access list that was used to filter accesses
  Could contain IP numbers or type of traffic (FTP, HTTP)
- ■ Access was denied
- ■ Protocol
- ■ Inbound IP address and port number
- ■ Inbound IP address and port number
- ■ Inbound IP address and port number

[ ]

I have added some pages to my Power Point presentation to clear up some ambiguities. I have marked them with green tabs.

1-2 are background slides that [ ] thought would help people understand our web environment.

3-4 discuss Hyper Text Transfer Protocol HTTP -- the rules that allow web browsers and web servers to talk to one another. The specific text from the standard is provided.

5 is the privacy and security notice that is used on DefenseLINK. There is a link to it on every page. Note paragraph 4 and paragraph 6. This notice was coordinated with OSD General Counsel [ ] It was also published in the Federal Register. OMB and Department of Justice were in on the discussions.

6-7 are to answer [ ] question about limited content on the web server. 6 shows the web services that all reside on a single hardware device with DefenseLINK. 7 is a listing of the directories on that hardware device that have access restrictions on them. Many of these are collaborative work spaces that are accessed only by a specific set of participants. There are many reasons we may want to restrict access: copyright, coordination, not yet cleared for public release…

We contacted [ ] During their Cyberattack the staff maintained watch over their system during the period ready to lockout specific IP sites if needed. As it turned out, they never had the inundation that was anticipated.

On my lower level contacts at Justice, they have not yet responded to my request about the guidance they have received.

Hope this helps.

[ ]

```
3447  den-co58-100.ix.netcom.com
3274  195.3.80.46
2861  user11.seg1.lkclair.ucf.edu
2664  dialup-sydax665.mpx.com.au
1742  amb87034.casaccia.enea.it
1475  195.3.80.39
1251  iq-ind-as002-57.iquest.net
1250  tnt1-145-51.cac.psu.edu
1117  195.3.80.49
1077  james.hut.fi
1072  195.3.80.66
1022  SL4.thing.net
1003  pitone.geco.it
 905  195.3.80.65
 831  evil.aec.at
 714  195.3.80.82
 555  line43.slip.csx.cam.ac.uk
 545  sanfrancisco-as01-vt018.ca.compuserve.net
 523  c230.pce.net
 491  cable-195-162-197-65.customer.tvd.be
 473  aligator.quantum.de
 453  203.35.163.18
 430  203.63.219.2
 365  restel-maxtnt-236.dialup.ndak.net
 355  dadovago1039.dada.it
 325  SunSITE.icm.edu.pl
 284  SL2.thing.net
 278  usr63-dialup35.mix2.Boston.mci.net
 273  c145.pce.net
 267  socio.demon.co.uk
 259  COCOWHEAT-30.SLIP.ANDREW.CMU.EDU
 234  155.40.161.219
 224  sandside.demon.co.uk
 222  bix.thehub.com.au
 219  pc-fameli-e.idg.fi.cnr.it
 213  194.185.110.80
 210  195.3.80.97
 174  198.161.29.228
 174  line55.bingo.baynet.de
 173  193.170.69.72
 165  dadovago1118.dada.it
 164  cyber110-3.paris.imaginet.fr
 162  165-82-92-24.students.haverford.edu
 161  eepc117.ee.surrey.ac.uk
 146  pppethan.webslingerZ.com
 140  pm3p21.iohk.com
 138  bellbird.qut.edu.au
 128  200.32.67.41
 121  194.202.158.32
 119  144.92.169.234
 119  X2modem162.digisys.net
 108  193.76.219.3
```

0909sort

```
107  cisco-ts15-line3.uoregon.edu
107  pec-11.au1.wi.uunet.de
105  208.240.147.82
 96  ip201-90.wiu.edu
 92  195.3.80.67
 90  usr03-17.provide.net
 87  tcp-relay-2.adobe.com
 86  stewart.SmallWorks.COM
 85  spider-wc042.proxy.aol.com
 78  waz.easynet.co.uk
 77  a85.Dynamic-IP.Mlink.NET
 73  194.243.86.183
 73  zf8c7.aueb.gr
 72  lpwa.com
 71  128.250.233.2
 69  moorlock.eorbit.net
 68  dnai-207-181-237-172.dialup.dnai.com
 67  office-32.balie.nl
 65  cacheflow1,gw.utexas.edu
 65  x1-6-00-60-97-6d-ac-2b.bc.edu
 63  195.67.67.98
 61  sprocket.dcn.davis.ca.us
 60  195.96.190.15
 57  gateway.spectrospin.ch
 57  mail.cpiprogetti.it
 56  ns.inm.de
 55  208-118-139.ipt.aol.com
 53  brescia-b60.numerica.it
 53  dial-in73.suffolk.lib.ny.us
 52  bowerbird.qut.edu.au
 50  ARPSTL-PROXY2.ARMY.MIL
 50  znrrr3-026.mcit.com
 49  proxy-len.om.com.au
 48  Atomas.Galea.Com
 48  m178.inf.unizar.es
 47  vincent.law.unc.edu
 44  gesualdoa.nexus.it
 44  jtg-eight-mac.well.ox.ac.uk
 44  udp004401uds.si.edu
 42  202.102.156.95
 42  204.61.76.110
 42  spider-wa013.proxy.aol.com
 41  n242-119.berlin.snafu.de
 40  proxy1a.lmco.com
 40  proxy3zhb.bluewin.ch
 38  restel-maxtnt-221.dialup.ndak.net
 37  dc2-modem269.dial.xs4all.nl
 36  dodig.osd.mil
 35  SHORTCIRCUIT.MAC.CC.CMU.EDU
 35  lookout4-13.clis.com
 35  naxos.inf.unitn.it
 34  206.228.252.15
```

34 gip-lausanne-nc.globalip.ch
34 squid.fu-berlin.de
33 131.36.168.209
33 Portal2.West.saic.com
33 inpub17.cc.nps.navy.mil
32 194.95.161.99
32 DLLSB102-38.splitrock.net
32 edmund.cyberdesic.com
32 ppp138.118.mmtl.videotron.net
32 usr18-121.provide.net
31 203.63.219.3
31 204.184.62.49
31 a-mi48-2.tin.it
31 mail.exchange.de
30 ppp207.distrito.com
30 tlvscl.vim.tlt.alcatel.it
29 207-172-118-100.s100.tnt13.brd.erols.com
29 cascade.cs.ubc.ca
29 lummox.vip.best.com
28 Go4iT.servus.at
28 PPP181.gator.net
27 129.29.109.207
27 den-co70-124.ix.netcom.com
27 plsl029.mscd.edu
27 pub-10-a-4.dialup.umn.edu
26 168.39.128.232
26 ppp47.usrtc1.carleton.ca
25 86-225.cnet.com
25 Portal.East.saic.com
25 avgate.army.cz
25 finch-06.www-cache.demon.co.uk
25 sam.cyberdesic.com
24 rochester-35.slip.uiuc.edu
24 ts044p1.tlv.netvision.net.il
23 PC40740.MAC.CC.CMU.EDU
23 TC1-dial-61-142.oldslip.inch.com
23 nyc-ny79-12.ix.netcom.com
23 phonak11.phonak.ch
22 204.252.7.239
22 client-151-197-111-131.bellatlantic.net
22 dd37-203.dub.compuserve.com
22 mir.ee.surrey.ac.uk
22 usero878.uk.uudial.com
21 198.25.159.251
21 ns1.osan.af.mil
21 pc633.ncsc.navy.mil
21 pdx-pm1-p33.coho.net
21 ppp-51x2-0407.mtl.total.net
20 194.109.8.253
20 nhchost-199.nhc.navy.mil
20 p33-max23.akl.ihug.co.nz
20 pc324.cpms.osd.mil

```
20  proxyca2.grolier.fr
20  sarppp6.net.usf.edu
19  194.230.54.5
19  198.85.68.14
19  216.13.11.98
19  m4407-fw1.ftmeade.army.mil
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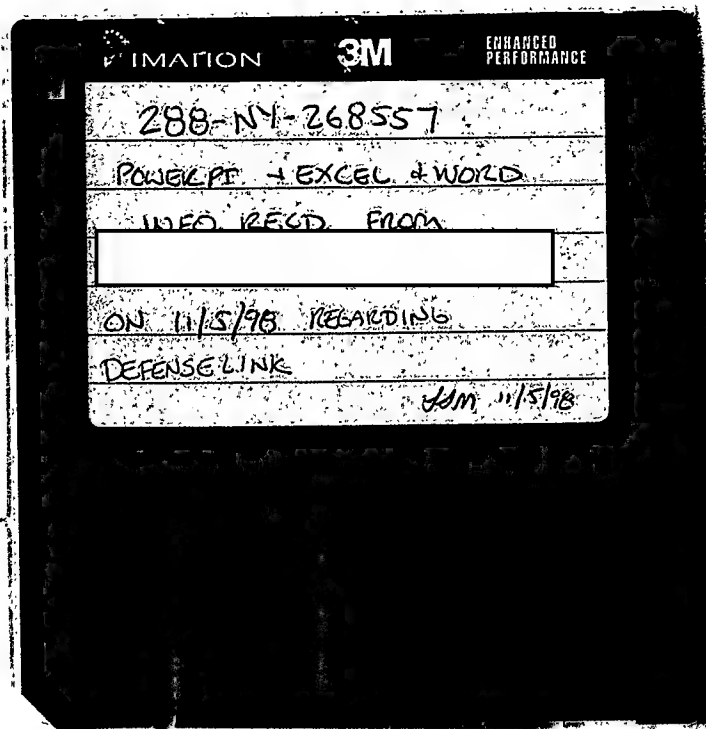
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3103

IMATION **3M** ENHANCED PERFORMANCE

288-NY-268557

POWERPT + EXCEL + WORD

INFO REC'D FROM

ON 11/5/98 REGARDING

DEFENSE LINK

JJM 11/5/98

b6
b7C per DTIC

(12/31/1995)

FEDERAL BUREAU OF INVESTIGATION

11-18-98

Precedence: PRIORITY   Date: 10/15/1998

To: New York   Attn: SSA
     Washington Field   Attn: SSA
                                        SA

Read by NYO

From: National Security
          NIPC/CIU/Room
          Contact: SSA   b6
                                                           b7C

Approved By:

Drafted By:

Case ID #: 288-WF-NEW   (Pending)
            288-HQ-1234199

Title: UNKNOWN SUBJECT(S), AKA
        ELECTRONIC DISTURBANCE THEATER (EDT)
        DEPARTMENT OF DEFENSE (DOD)
        CITA - Denial of Service/Intrusion

Synopsis: WFO is requested to obtain opinions from the Eastern
District of Virginia (EDVA) concerning both the Electronic
Disturbance Theater (EDT) actions and the Department of Defense
(DoD) actions in this matter.

                                                           b6
Administrative: Re conversation with SA   10/8/98;   b7C
and SSA   10/9/98.

Enclosure(s): For New York and WFO are the following is one
package of various materials providing background on the EDT and
their protest.

Details: The Electronic Disturbance Theater (EDT) is apparently
a group of about five activists which has primarily targeted
Mexican and U.S. Government computer sites in support of Mexico's
Zapatista National Liberation Army. The EDT promotes a tactical
device called "FloodNet," designed to disrupt access to targeted
web sites by flooding the host server with requests for that web
page. The EDT's claims and agenda have been posted on a web site
located at New York University.

288-NY-268557-6

        In September the EDT targeted the Mexican President's web
page, the Pentagon in the U.S., and the Frankfurt Stock Exchange
in Germany. The EDT bulletin board advised that the efficiency
of the actions were minimal due to countermeasures which blocked

SEARCHED____ INDEXED____
SERIALIZED____ FILED____

NOV 23 1998

FBI — NEW YORK

288-NY-268557

the action, and which caused the participant's hard drives to
crash.   The Pentagon confirmed the use of effective
countermeasures, with no damage to their system.

The subject matter resulted in no known damage to U.S.
systems, no impact status was received from overseas, and no
overseas complaint was received.

Information from an article in Defense News indicates
that [   ] was one of the EDT individuals involved in the
action. [   ]   b6
[   ] in the article talks about the EDT actions, and that   b7C
he is not worried about the legality of the actions as he was not
involved in anything illegal.   He also advised that New York
University informed him that he must remove the EDT web site from
the university network.

The article indicates the participants used a computer
mini-application (applet) to set up the participant's computers
to dial and redial the Pentagon web site, DefenseLink.   The sheer
volume of requests was intended to shut down the server
supporting DefenseLink.   The EDT posted their intentions on the
Internet, which allowed the Department of Defense (DoD) to
receive warning and counter the protest.   According to [   ] the   b6
Pentagon placed on its web site an applet that activated whenever   b7C
FloodNet was detected, which shut down the participant's
Internet browsers.

A Pentagon spokeswoman acknowledged the Defense
Technology Information Center, which supports the DefenseLink Web
site, launched an effective counter-measure, which they believe
is defensive in nature and legal.

The balance of the article contains a discussion
concerning the Pentagon possibly having crossed the "line"
between offense and defense, and may have been illegal.   Some
consider the Pentagon's action to be offensive information
warfare because it attacked back to cause a disruption of service
or disrupt the system of the participant.

On 10/7/98 the Department of Justice (DOJ) was contacted
concerning the actions of DoD, and their opinion was that the DoD
may have committed a misdemeanor violation by their actions, and
that DOJ would contact the DoD General Council's Office and
advise them to discontinue the DoD actions.

On 10/7/98 a DOJ representative advised that DoD was
questioning why the FBI did not have the EDT under investigation.
DOJ has not furnished any opinion concerning the actions of the
EDT.

To: New York   From: National Security
Re: 288-WF-NEW, 10/15/1998

        The involved Legats were requested to furnish available
details. The New York office does not have a pending
investigation on this matter.

        The enclosure contains information that the EDT was
prepared to release a FloodNet package to a group protesting the
Federal Communications Commission (FCC). As this protest action
will apparently continue into the future, with the computer
systems of the U.S. Government being a probable target, is was
decided to obtain opinion and guidelines from DOJ (EDVA). It is
expected that the bulk of protest actions will be received within
WFO's division.

        As New York has members of the EDT within their division,
it is requested that New York be kept advised of developments.

LEAD(s):

Set Lead 1:

   <u>WFO</u>

      <u>AT ALEXANDRIA, VIRGINIA</u>

     Determine additional information as necessary and present this matter's actions involving both the EDT and the DoD to the EDVA and obtain AUSA opinions concerning both organizations. Attempt to obtain a guideline as to protest actions directed against government computers, and confirm AUSA's opinion. If appropriate, furnish both AUSA confirmation and closing communication to FBIHQ and New York.

♦♦
CC:

                                                      b6
                                                    b7C

(12/31/1995)

FEDERAL BUREAU OF INVESTIGATION

Precedence: PRIORITY   Date: 11/10/98

To: FBIHQ   Attn: NIPC / CIU / [_____]
                                           SSA [_____]

     FBIHQ   NIPC / CIU / [_____]
                                           IOS [_____]

  ✓ New York   [_____]
                                           SA [_____]

From: WFO
        [_____]
          Contact: SA [_____]   b6
                                                            b7C Ⓧ

Approved By: [_____]

Drafted By: [_____] :maj

Case ID #:   288-WF-0-342   (Pending)
             288-HQ-1234199-6 (Pending)
          ✓ 288-NY-268557,7 (Pending)

Title: UNKNOWN SUBJECT(S), AKA
        ELECTRONIC DISTURBANCE THEATER (EDT)
        DEPARTMENT OF DEFENSE (DOD)
        CITA - Denial of Service

Synopsis: Lead covered, unless further advised.

Administrative: FBIHQ EC dated 10/15/98.

Details: On 11/04/98 [_____] AUSA for the Eastern District   b6
of Virginia (EDVA), and [_____] Department of Justice on   b7C
temporary assignment to the EDVA, were advised of the FBIHQ lead
dated 10/15/98. [_____] advised that the Defense Criminal
Investigative Service (DCIS) is already investigating this matter
and Special Agent [_____] would be able to provide
details.

        On 11/06/98 DCIS Special Agent [_____] provided
WFO with a written explanation of the DEPARTMENT OF DEFENSE's   b6
actions which prevented the denial of service attack by the   b7C
ELECTRONIC DISTURBANCE THEATER (EDT). On 11/06/98 WFO provided a
copy of this information to FBIHQ, [_____]

        In the information DCIS provided, the DEFENSE
TECHNOLOGY INFORMATION CENTER (DTIC), located in Arlington VA,
advised that they were aware in late August that DefenseLINK was
the target of a cyberattack sponsored by the EDT. EDT planned to
flood DefenseLINK with multiple requests in an attempt to cause a
denial of service on 9/9/98. On the day of the attack, malicious

288-NY-268557-7

traffic to the DTIC servers began with multiple requests to the search engine. Many of the initial requests that were meant to tie up the DTIC servers came from Austria.

_____ DTIC, advised that in an attempt   b6
filter out the denial of service attempts and still provide   b7C **per DTIC**
service to legitimate users, the DTIC wrote a Perl script that redirected any malicious traffic away from DefenseLINK to a non-existent site. When the EDT protestors continually sent request messages to the search engine, the protestors should have received an error message pop-up, advising that the DefenseLINK website could not be found. If the protestors launched multiple attacks, then with every attempt to shut down DefenseLINK, the protestors would get another error message back. As a result, with all of these error messages coming back, the protestor would be forced to reboot the machine.

Therefore, redirecting the malicious traffic to a non-existent site prevented the denial of service to DefenseLINK and still permitted access for legitimate users. This rerouting of malicious traffic would not have damaged the protestors' computers, but simply caused them to reboot.

On 11/10/98 the Eastern District of Virginia declined prosecution of anyone at DTIC based on the information provided above. The Eastern District further declined comment on any hypothetical cases involving government protests which may occur in the future.

On 11/10/98 the Eastern District of Virginia further   b6
advised that the venue for the prosecution of EDT should be New   b7C
York. SA _____ advised that the New York Field Office
has an open case (288-NY-268557) on the ELECTRONIC DISTURBANCE
THEATER and any individuals who take part in these protests.

UACB, WFO considers this matter RUC.

♦♦